

UNITED STATES PATENT AND TRADEMARK OFFICE

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			GILLIAM, BARBAPA LEF	
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			DATE MAILED 12/12/2002	

Please find below and or attached an Office communication concerning this application or proceeding.

Application No.

Applicant(s)

Office Action Summary

1,002,044

LAN DAMME ET AL

Examiner

Art Unit

Barbara Gillam

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE AMONTHIS FROM THE MAILING DATE OF THIS COMMUNICATION Patrick of the marker was decorated by some of DEF the accomplished makes on a long treatment at a state of a the control of t

Status			
1)[Flesponsive to communication(s:	filed on <u>amdt, priorit</u>	y & IDS filed 11 2.01
2a)	This action is FINAL	25) This action	is non-fina
3)	closed in accordance with the pra		eept for formal matters, prosecution as to the merits is <i>Quayle</i> , 1935 C.D. 11, 453 O.G. 213.
•	on of Claims		
	Claim(s): $\underline{1-10}$ is are pending in the		
	4a) Of the above claim(s) is	are withdrawn from	consideration.
	Claim(s) is are a lowed.		
	Claim(s) <u>1-10</u> s are rejected.		
7)	Claim(s: is are objected to		
	Claim(s) are subject to restr	riction and or election	n requirement.
	on Papers		
9) 🗌 -	The specification is objected to by t	he Examiner	
10)	The drawing(s) filed ons are	er ie:□ accepted or b)	☐ objected to by the Examiner
	Applicant may not request that an Lo	bject in to the drawing	usi bë hed in ahe, ance i See 37 CFR 1 hFrai
11)[The proposed drawing correction fil	ed or is a)[]	approved b) d sapproved by the Examiner
	If approved, corrected drawings are r	required in reply to this	Office action
12)	The path or declaration is objected	to by the Examiner.	
Priority u	nder 35 U.S.C. §§ 119 and 120		
131⊡	Acknowledgment is made of a claim	m for foreign priority	under 35 U.S.C. § 119(a)-(d) or (f)
a)(Au bill Some cill None of		
	$^{+}$ \square . Certified copies of the phonit	y documents have b	een recewed
	2 Certified copies of the priorit	y documents have be	een received in Application No
	3 [7] Copies of the pertified copies application from the Intel ee the attached detailed Office act	rnational Bureau i PC	
			under 35 U.S.C. § 119(e) (to a provisional application)
	The translation of the foreign la		
*(5),] A	koknowledgment is made of a claim	for domestic priority	. under 35 U.S.C. §§ 120 and or 121
Attachment			
	The term of the particle of the control of the cont	entropia.	4 (Fig. 1) the Lew Submary et al. 41 median North Community (1997) and the submary et al. (1997) and (19

DETAILED ACTION

- 1. The preliminary amendment filed November 2, 2001 has been entered and considered.
- 2. Claims 1-10 are pending.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

- 4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 5. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- a. In claim 2, Applicant attempts to further limit the organic compound of elaim 1 however it is unclear what is meant by "derived" since claim 1 is not a method or process of making the organic compound.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 7. Claims 1, 4-7, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by DeBoer.
- a. In WO 99 19143, DeBoer teaches a lithographic plate made by coating a support web with a coextensive ink receptive photothermal conversion layer and then overcoating with an ink repellant layer comprising a cross-linked polymeric matrix containing a colloid of an oxide or a hydroxide of a metal selected from the group consisting of beryllium, magnesium, aluminum, silicon, gadolinium, germanium, arsenic, indium, tin, antimony, tellurium, lead, bismuth, a transition metal and combinations thereof, along with a photothermal conversion material (abstract). The photothermal layer comprises a photothermal conversion material such as a dye or pigment and a binder such as nitrocellulose (page 6, line 13-page 7, line 15). The photothermal layer meets the present limitation for the oleophilic imaging layer. In Example 5, a grained and anodized aluminum support was coated with a photothermal layer and a crosslinked layer comprising a carbon dispersion wherein the carbon is modified with sulfonic acid at the surface. The sulfonic acid surface modified carbon meets the present limitations for the organic compound for formula II. The top layer meets the present limitations for the crosslinked upper layer. The resulting plate was then exposed to a focused diode laser beam with an intensity of 3 mW/m·. After exposure the plate was directly mounted on a printing press and impressions were made. (page 12, line 26 page 13, line 6 & page 11, line 18). The process for using the resulting

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lithographic plate comprises the steps of exposing the plate to a focused laser beam in the areas where ink is desired in the printing image and employing the plate on a conventional lithographic printing press (page 9, line 32 - page 10, line 1). Therefore the plate is negative working.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeBoer in view of Van Damme et al.
- a. As indicated in the corresponding 35 U.S.C. 102(b) rejection above, DeBoer teaches a lithographic plate made by coating a support web with a coextensive ink receptive photothermal conversion layer and then overcoating with an ink repellant layer comprising a cross-linked polymeric matrix containing a colloid of an oxide or a hydroxide of a metal wherein the ink repellant layer comprises a dispersion of sulfonic acid surface modified carbon. DeBoer does not teach the thickness of the photothermal layer or the top melanophobic layer however, it would have been obvious to coat each of the layers at a thickness consistent with similar layers in the printing plate art. In US Patent No. 6.399.276, Van Damme et al teach a processless printing plate comprising in the order given on a support an IR-sensitive oleophilic layer and a crosslinked

hydrophilic layer (abstract). The oleophilic layer is coated at a dry weight of from 0.5 to 30 g/m- (column 5, lines 8-9). The crosslinked hydrophilic layer of Van Damme et al preferably also contains particles of oxides or hydroxides to increase mechanical strength and porosity of the layer. Van Damme et al teach coating the crosslinked layer at a thickness of 0.3 to 5 μ m (column 4, lines 4-38).

b. Therefore it would have been obvious to one of ordinary skill in the art to make and expose a lithographic plate comprising a grained and anodized aluminum support, a photothermal layer having a coating weight of 0.5 to 30 g/m² and a crosslinked layer having a thickness of 0.3 to 5 μ m based on the teachings of Van Damme et al without chemical processing.

Conclusion

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. In US Patent Nod. 6,413,694; 6,410,202; 6,399,268; 6,352,812; 6,190,831; 6,190,830; 6,162,578; 6,159,657; 6,136,503; 5,985,514 thermally switchable imaging members are taught.
- b. In US Patent No. 6,357,353. Vermeersch et al teach a dry method for preparing a thermal lithographic printing plate precursor.
- c. In US Patent No. 6,110,645, DeBoer et al teach a method of imaging lithographic printing plates with high intensity laser.

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d. In US Patent No. 5,962,188, DeBoer et al teach direct write lithographic printing plates.

e. In US Patent No. 5.908,731, Leenders et al teach a heat sensitive imaging element and a method for producing lithographic plates therewith.

f. In US Re. 35.821. Niki et al teach pattern forming method including the formation of an acidic coating layer on a radiation sensitive layer.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara Gilliam whose telephone number is 703-305-1330. The examiner can normally be reached on Monday through Thursday.

a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Baxter can be reached on 703-308-2303. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

b. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

3. Gilliam

B. Gilliam December 4, 2002